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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/712,005	11/13/2000	Purnam Anil Sheth	CISCO-3096	8953

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EXAMINER

NGUYEN, QUANG N

ART UNIT	PAPER NUMBER
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2141

DATE MAILED: 09/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/712,005

Applicant(s)

SHETH ET AL.

Examiner

Quang N. Nguyen

Art Unit

2141

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-71 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 52-71 is/are allowed.
- 6) ☒ Claim(s) 1-5, 9-11, 14-18, 22-24, 27-31, 35-37 and 40-51 is/are rejected.
- 7) ☒ Claim(s) 6-8, 12, 13, 19-21, 25, 26, 32-34, 38 and 39 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 November 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>20050804</u> . | 6) <input type="checkbox"/> Other: _____ |

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Detailed Action

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08/04/2005 has been entered.

Claims 1, 14, 27, 63, 64, 66, 68, 69 and 71 have been amended. Claims 1-71 are presented for examination.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. **Claims 1-2, 14-15 and 27-28 are rejected under 35 U.S.C. 102(a) as being anticipated by Jacobson et al. (US 6,044,402), herein after referred as Jacobson.**

4. As to claim 1, Jacobson teaches a method for controlling subscriber access in a network capable of establishing connections with a plurality of domains, comprising:

receiving, at an access server coupled to a first communication network and a second communication network, a communication from a subscriber on said first communication network (*i.e., receiving, at a gateway 106 coupled to a first subnet 102-1 and a second subnet 102-2, a packet 114 transmitted between the protected hosts 104-1 within the subnet 102-1 and the remote hosts 104-2 within the subnet 102-2*), said communication optionally including a domain identifier associated with a domain on said second communication network (*a network header 142 in each packet 114 containing a transport protocol ID 148, a source address 144 and a destination address 146 which is a domain identifier associated with a domain on said second communication network*) (Jacobson, Fig. 1, C3: L27-56 and C11: L1-22);

determining whether said subscriber is authorized to access said domain based upon said domain identifier and a list of authorized domains for a virtual circuit used to received said communication (*the blocking controller 170 determines whether to block or authorize the connection based on the network access list 212, i.e., a list of authorized domains, and the source and destination addresses in the connection information set*) (Jacobson, C15: L66-67, C16: L1-21 and C18: L42-53); and

authorized subscriber access to said domain on said second communication network when said domain identifier is included in said list (*if the source or destination address 144 or 146 is in the network access list, then the connection is to be allowed*) (Jacobson, C18: L42-53).

5. As to claim 2, Jacobson teaches the method of claim 1, further comprising terminating said communication when said domain identifier is not included in said list (Jacobson, C18: 1-42-53).

6. Claims 14-15 are corresponding program storage device claims of method claims 1-2; therefore, they are rejected under the same rationale.

7. Claims 27-28 are corresponding apparatus claims of method claims 1-2; therefore, they are rejected under the same rationale.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described, as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claims 3-5, 9-11, 16-18, 22-24, 29-31, 35-37 and 40-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobson, in view of Loehndorf, Jr. et al. (US 6,094,437), herein after referred as Loehndorf.**

10. As to claims 3-4, Jacobson teaches the method of claim 1, but does not explicitly teach said communication comprises a Point-to-Point Protocol (PPP) session, which in turn comprises a tunneling session and said PPP session is forwarded onto a tunnel associated with an assigned tunnel ID when said subscriber is authorized to access said domain.

In a related art, Loehndorf teaches that the Point-to-Point Protocol (*PPP*) has been standardized by the Internet Engineering Task Force (*IETF*) to be used to allow Internet Protocol (*IP*) and other protocols (*such as IPX, XNS, AppleTalk, etc.*) to be sent over non-IP mediums such as the Public Switched Telephone Network (*PSTN*), ATM, Frame Relay, SONET, etc. in Internet communications. Loehndorf also teaches the IETF developed the L2TP (Layer Two Tunneling Protocol) to allow the PPP session to be tunneled over the Internet by establishing the tunnel using a tunnel ID (*i.e., forwarding PPP session onto a tunnel associated with an assigned tunnel ID*) (Loehndorf, C1: L43 - C3: L25 and C11: L36-67).

Therefore, it would have been obvious to one having ordinary skills in the art at the time the invention was made to forward a PPP session onto a tunnel associated with an assigned tunnel ID when said subscriber is authorized to access said domain since such methods were conventionally employed in the art to securely send data between networks and to provide needed and improved functionality.

11. As to claim 5, Jacobson-Loehndorf teaches the method of claim 4, wherein said tunnel session comprises an L2TP session (C2: L66 - C3: L7).

12. As to claim 9, Jacobson-Loehndorf teaches the method of claim 5, wherein said determining further comprises:

issuing a tunnel ID request including domain name and a virtual circuit identifier *(the routing function of L2TP access payloads is performed on the L2TP tunnel information, which includes the L2TP tunnel ID and call ID with the proper IP and UDP source and destination addresses, i.e., the incoming call tunnel addressing "ICT" that the L2TP Access Concentrator "LAC" communicates the service provider that it wishes to use, by the tunnel that it chooses to send data over); and*

receiving a tunnel ID (Loehndorf, C11: L1-55).

13. As to claim 10, Jacobson-Loehndorf teaches the method of claim 9, wherein an AAA server services said tunnel ID request (Loehndorf, C2: L32-46).

14. As to claim 11, Jacobson-Loehndorf teaches the method of claim 9, wherein said virtual circuit identifier comprises a VPINCI identifier *(Loehndorf teaches that IP packets may be transported as AMT cells, wherein it is well-known in the art that each ATM cell contains 48 bytes payload and 5 bytes header containing virtual path identifier "VPI" and virtual channel identifier "VCI" fields, which defines a channel).*

15. Claims 16-18 and 22-24 are corresponding program storage device claims of method claims 3-5 and 9-11; therefore, they are rejected under the same rationale.

16. Claims 29-31 and 35-37 are corresponding apparatus claims of method claims 3 and 9-11; therefore, they are rejected under the same rationale.

17. Claims 40-51 are corresponding access server claims of method claims 1, 3-5 and 9-11; therefore, they are rejected under the same rationale.

Allowable Subject Matter

18. Claims 6-8, 12-13, 19-21, 25-26, 32-34, 38-39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

19. Claims 52-71 are allowed.

Response to Arguments

20. In the remarks, applicant argued in substance that

(A) Prior Art does not teach, “determining whether said subscriber is authorized to access said domain based upon said domain identifier and a list of authorized domains for a virtual circuit used to received said communication”.

As to point (A), before addressing the argument, Examiner submits that the language of the limitation cited in the quotation “domain identifier” can be given the broadest and reasonable interpretation in light of the specification as according to the Webopedia.com definition of “domain”, wherein within the Internet, domains are defined by the IP address and all devices sharing a common part of the IP address are said to be in the same domain.

Here, **Jacobson** teaches a method for controlling subscriber access in a network capable of establishing connections with a plurality of domains, wherein the blocking controller 170 determines whether to block or authorize the connection based on the network access list 212 (*i.e., based on a list of authorized domains*), and the source and destination addresses which are IP addresses in the connection information set (*i.e., and based upon said domain identifier*) (**Jacobson, C15: L66-67, C16: L1-21 and C18: L42-53**).

(B) Prior Art does not teach, “authorized subscriber access to said domain on said second communication network when said domain identifier is included in said list”.

As to point (B), **Jacobson** teaches the blocking controller determines whether the connection should be allowed/authorized based on the network address access policy in the network access list 212 and whether the source or destination network address 144 or 146 in the connection information set which is the network address of the other host computer is in the network address list. If the source or destination address 144 or 146 is in the network access list, then the connection is to be allowed (**Jacobson, C18: L42-53**).


21. Applicant’s arguments as well as request for reconsideration filed on 08/04/2005 have been fully considered but they are not deemed to be persuasive.

22. A shortened statutory period for reply to this action is set to expire THREE (3) months from the mailing date of this communication. See 37 CFR 1.134.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quang N. Nguyen whose telephone number is (571) 272-3886.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's SPE, Rupal Dharia, can be reached at (571) 272-3880. The fax phone number for the organization is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


RUPAL DHARIA
SUPERVISORY PATENT EXAMINER